LISTING OF CLAIMS

1-9. (Cancelled)

10. (Withdrawn) A method for manufacturing a carbonaceous nanotube, comprising:

mixing a transition metal compound, containing at least one transition metal atom, a sulfur compound, containing at least one sulfur atom, an organic compound containing a hydrocarbon, and a carrier gas, to obtain a raw material mixture;

adjusting said raw material mixture supply so that the concentration of said transition metal atom in said raw material mixture is in the range from about 0.025 ~ 0.5 mol %, and the concentration of said hydrocarbon in said raw material mixture is in the range represented by $(273/(T-1000))^4$ ~ 10((73/T-1000)) mol %, wherein T represents the absolute temperature (K) of the reaction region.

supplying said raw material mixture to a reaction region maintained at a temperature of about 900 ~ 1,300°C inside a reaction tube;

adjusting said raw material mixture supply so that the concentration of said transition metal atom in said raw material mixture is in the range from about 0.025 ~ 0.5 mol %, and the concentration of said hydrocarbon in said raw material mixture is in the range represented by $(273/T - 1000))^4$ ~ 10(73/T - 1000)) mol %, wherein T represents the absolute temperature (K) of the reaction region.

11. (Withdrawn) The method for manufacturing a carbonaceous nanotube according to claim 10, wherein said transition metal compound is ferrocene.

12. (Withdrawn) The method for manufacturing a carbonaceous nanotube according to claim 10, wherein said sulfur compound is thiophene.

13. (Currently amended) A carbonaceous hollow nanotube comprising:

a carbon material and having an inner diameter less than or equal to 5nm; and an outer diameter wherein the difference between said outer diameter and said inner diameter is equal to or less than 20nm;

said carbon material comprising hydrogen atoms, carbon atoms and at least one transition metal atom; wherein said nanotube is annular and tube-shaped; and

wherein said nanotube comprises a plurality of disordered, annular, tube-shaped layers and the disordering is caused by hydrogen atoms.

14. (Previously presented) The carbonaceous nanotube according to claim 13 wherein the difference between said outer diameter and said inner diameter is equal to or less than 10nm.

15. (Previously presented) The carbonaceous nanotube according to claim 13 wherein said transition metal is iron.

16. (Currently amended) A fiber aggregate comprising: carbonaceous hollow nanotubes comprising a carbon material and having an inner diameter of less than or equal to 5 nm; and an outer diameter wherein the difference between said outer diameter and said inner diameter is equal to or less than 20 nm;

said carbon material comprising hydrogen atoms, carbon atoms, and at least one transition metal atom;

said carbonaceous nanotubes comprising at least 70 weight % of said fiber aggregate;

said hydrogen atoms comprising 0.1 to 1 weight % of said fiber aggregate; and

said carbon atoms comprising at least 98.5 weight % of said fiber aggregate; wherein said nanotubes are annular and tube shaped; ~~and~~

wherein said nanotubes comprise a plurality of disordered, annular, tube-shaped layers and the disordering is caused by hydrogen atoms.

17. (Previously Presented) The fiber aggregate according to claim 16 further wherein the difference between said outer diameter and said inner diameter is equal to or less than 10nm.

18. (Previously Presented) The fiber aggregate according to claim 16 wherein said transition metal is iron.

19. (Previously Presented) The fiber aggregate according to claim 16 wherein said transition metal comprises 0.005 to 1 weight % of said aggregate.

20. (Currently amended) A carbonaceous hollow nanotube, comprising:

a carbon material and having an inner diameter less than or equal to 5nm; and an outer diameter wherein the difference between said outer diameter and said inner diameter is equal to or less than 20nm;

said carbon material comprising hydrogen atoms and carbon atoms;

wherein said nanotube comprises a plurality of disordered, annular, tube-shaped layers and the disordering is caused by hydrogen atoms.

21. (Previously presented) The carbonaceous nanotube according to claim 20 wherein the difference between said outer diameter and said inner diameter is equal to or less than 10nm.

22. (Currently amended) A fiber aggregate comprising: carbonaceous hollow nanotubes comprising a carbon material and having an inner diameter of less than or equal to 5 nm; and an outer diameter wherein the difference between said outer diameter and said inner diameter is equal to or less than 20 nm;

said carbon material comprising hydrogen atoms and carbon atoms;

said carbonaceous nanotubes comprising at least 70 weight % of said fiber aggregate;

said hydrogen atoms comprising 0.1 to 1 weight % of said fiber aggregate; and

said carbon atoms comprising at least 98.5 weight % of said fiber aggregate; wherein said nanotubes comprise a plurality of disordered, annular, tube-shaped layers and the disordering is caused by hydrogen atoms.

23. (Previously presented) The fiber aggregate according to claim 22 further wherein the difference between said outer diameter and said inner diameter is equal to or less than 10nm.